



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,231	10/23/2003	Tomokazu Kake	81659 [SC-70004US]	1421
22242	7590	10/07/2005	EXAMINER	
FITCH EVEN TABIN AND FLANNERY 120 SOUTH LA SALLE STREET SUITE 1600 CHICAGO, IL 60603-3406			BROOME, SAID A	
			ART UNIT	PAPER NUMBER
			2671	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/693,231		KAKE ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Said Broome		2671	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28, 31-37 and 39-42 is/are rejected.
- 7) ☒ Claim(s) 29, 30 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 40 and 41 are objected to because the preamble of both claims describes "A program executable by a computer...". This objection may be overcome if the preamble of claims 40 and 41 are amended to state that the program product is embodied on a computer readable medium and is executed on a computer.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-10, 13, 14, 29 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldberg et al. (US Patent 5,963,203).

Goldberg et al. teaches what is disclosed in claims 1, 4 and 40 in column 4 lines 45-65 where it is described that moving pictures are represented as two-dimensional images that vary along a time axis in a virtual manner as a box space(column 10 lines 4-20), cutting the box space by a surface that contains a plurality of points(column 1 lines 29-32) each of which differs from the other in time, projecting the image that appears on the cut surface onto a plane in the direction of a time axis, and outputting the images appearing on the plane as new moving pictures by varying the cut surface in time(column 4 lines 59-65). Regarding claim 4, Goldberg

Art Unit: 2671

et al. also teaches an image memory which sequentially stores the original moving pictures along a time axis in column 9 lines 51-56, as well as an image conversion unit, or central processing unit, that processes the moving pictures as two-dimensional images that vary along a time axis in a virtual manner as a box space and also serves as an image data output unit that sets the displayed frames in column 9 lines 58-67. Goldberg et al. also describes what is disclosed in the preamble of claims 1, 4 and 40 which includes an image generating method in column 13 lines 34-65 also illustrated in Figure 10, an image generating apparatus as described in column 9 lines 36-50 also illustrated in Figure 2, a program executable by a computer as described in column 9 lines 51-56 also illustrated in Figure 2 as element 11, and a recording medium which stores a program executable by a computer in column 9 lines 45-50 which is also illustrated in figure 2 as element 7.

Goldberg et al. describes the limitations of claims 2 and 5 in column 10 lines 8-20, where a cut surface in time is realized by moving the surface along the time axis is described, and is also illustrated in Figure 4.

Goldberg et al. describes the limitations of claims 3 and 7 in column 11 lines 53-62, where the surface is described to be defined by a function of coordinates of points contained in the two-dimensional image. Goldberg et al. also illustrates what is disclosed in claim 3 in Figure 7A.

Goldberg et al. describes the limitation of claim 8 in column 11 lines 58-62 where a surface is defined by the coordinate location that comprises the pixels of an image region and does not depend on the horizontal coordinate, or scanning line, of the two-dimensional image.

Goldberg et al. describes the limitation of claim 9 in column 11 lines 53-62 where the image conversion unit(column 9 lines 58-64) cuts the box space by a surface that is defined by a function of attribute values, which are values that determine the contents of a display for each pixel, for an image region constituting the two-dimensional image. Goldberg et al. also describes the selection of a particular object within the image frame using coordinates to designate certain pixels within the image region to be cut and displayed as shown in Figure 6B.

Goldberg et al. describes the limitation of claim 10 in column 9 lines 44-45 where a setting input unit is described, and it is also illustrated in Figure 2 as elements 4 and 5. Goldberg et al. also describes the limitations of claim 10 in column 7 lines 20-31 where via a user operation a setting value is used to define the surface where the image conversion unit cuts the box space by the surface defined by a function of the setting value acquired by the setting input unit, as illustrated in Figure 6B.

Goldberg et al. describes the limitation of claim 13 in column 6 lines 34-43 where the rate of the moving picture is partially changed by the image conversion unit(column 9 lines 58-64) to be outputted from the image data put unit in a manner such that according to attribute values, which are values that determine the contents of a display for each pixel, of image regions that constitute the two-dimensional image surfaces vary in time with a different speed for each of the image regions as designated by the user.

Goldberg et al. also describes the limitation of claim 14 in column 4 lines 51-57 where it is described that a time value, or z value, is used to designate the time separation between the frames and would therefore correspond to the current frame as a present frame and the preceding and succeeding frames to include time values of past and future respectively.

Goldberg et al. describes what is disclosed in claim 29 in column 16 lines 33-41 where an attribute value, which is a value that designates the pixel position of the region of interest and is inherently utilized to select the region of interest, is described as a value that indicates the order of approximation, or an estimation that determines whether the object of interest is present in respect to a desired image pattern, which is determined by using known pattern matching techniques.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 15, 17, 18, 21, 22, 34, 36, 41 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (US Patent 6,665,342).

Regarding claims 15, 18, 41 and 42, Brown describes reading out for each in-picture position of an image contained in a target frame, as illustrated in Figure 4 as elements 320A and 320B, as data that corresponds to the in-picture position from at least one of a plurality of frames contained in the original moving pictures in column 5 lines 12-15 and 25-35. Brown et al. also describes synthesizing the data in column 5 lines 32-35, where the image is updated with all the digital data from the still image frames. Brown et al. also describes the formation of new

Art Unit: 2671

moving pictures by sequentially outputting frames formed by synthesizing in column 4 lines 10-14 where it is described that the plurality of video image frames are synthesized into an image that shows the progression of movement throughout the frames, which also allows new moving pictures to be output from the synthesized frames formed from this process. Regarding claim 18, the image memory is described in column 4 line 8, and is also illustrated in Figure 1 as element 130. Regarding claim 41, recording for each frame is described in column 4 lines 2-6, and is also illustrated in Figure 1 as element 105.

Brown et al. describes what is disclosed in claim 17 in column 5 lines 25-35 where the synthesizing of the image frames is done by a ratio, or a proportional difference between each image frame as stored in the segmentation mask, in respect to an attribute value of the image contained in one of the plurality of frames.

Brown et al. describes what is disclosed in claim 21 in column 3 lines 6-11 and column 5 lines 58-61, where it is described that an attribute value is determined for each in-picture position by an image conversion unit(column 6 lines 10-11) that performs processing and synthesizing of the video image data.

Brown et al. also describes the limitation of claim 22 in column 4 lines 59-66 where the plurality of frames, which are processed by the image conversion unit(column 6 lines 10-11), are described to contain predetermined time intervals,  $\delta$ , that are incremented in a predefined manner as denoted by  $t_{i+1}=t_i+\delta$ . Brown et al. further teaches the limitation of claim 22 in column 7 lines 2-5 where it is described that the time intervals are separated as intervals in accordance with an attribute value. The time intervals are determined by the image conversion unit(column 4 lines 8-

10) that is responsible for the processing illustrated in Figure 3, processes the digital video image data illustrated in Figure 3 as element 140 and is described in column 4 lines 8-10.

Brown et al. describes what is disclosed in claim 34 in column 5 lines 58-61 where it is described that the attribute value is a value computed for each pixel.

Brown et al. also describes what is disclosed in claim 36 in column 4 lines 2-6, where it is described that a image input unit(element 140 of Figure 1) acquires images shot by a camera(element 120 of Figure 1) and sends the images to an image memory(element 130 of Figure 1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US Patent 5,963,203) in view of Brown et al. (US Patent 6,665,342).

Goldberg et al. teaches what is disclosed in claim 6 except for the definition of the surface in a manner such that the surface has continuous width in the direction of the time axis and the image conversion unit synthesizes images within the width. Brown et al. shows the surface of the frames having a continuous width in Figure 2. Brown et al. also teaches the image



Art Unit: 2671

conversion unit(column 9 lines 58-64) synthesizes the two-dimensional images that are shown to be defined within a constant width in Figure 2, is described in column 3 lines 61-64. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Brown et al. because this combination would produce a surface that is defined in a manner such that all the image frames are continuously and consistently synthesized within the same width so as so avoid distortion of the synthesized image frame/s.

Goldberg et al. teaches what is disclosed in claim 33 except that the attribute value is a pixel value. Brown et al. teaches what is disclosed in claim 33 in column 5 lines 58-61 where it is described that the attribute value is a value computed for each pixel. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Brown et al. because this combination would provide an attribute value that would be utilized to determine particular pixels within an image region be displayed at certain time intervals.

Goldberg et al. teaches what is disclosed in claim 35 except that an image input unit acquires original moving pictures shot by a camera and then sends the images to an image memory. Brown et al. teaches what is disclosed in claim 35 in column 4 lines 2-6, where it is described that a image input unit(element 140 of Figure 1) acquires images shot by a camera(element 120 of Figure 1) and sends the images to an image memory(element 130 of Figure 1). It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Brown et al. because this combination would provide an input of several moving image frames that are saved in memory for later division into image frame surface within a virtual box space in respect to a time axis.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US Patent 5,963,203) in view of Kaneko et al. (US Patent 6,940, 997).

Regarding claims 11 and 12, Goldberg et al. teaches all the limitations of the claims including a display screen(element 3 of Figure 2) and an input unit(column 9 lines 44-45). However, Goldberg et al. fails to teach the curve that indicates the relationship between coordinates of points contained in the two-dimensional images and time values. Kaneko teaches a relationship between the coordinates of points contained in the two-dimensional images and time values in column 12 lines 20-28, and is also illustrated on a graph represented by a curve in Figure 2C. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Kaneko et al. because this combinations would provide a visual relationship between the two-dimensional coordinate points and time values that would be modified by a user to enable the ability to adjust the generated curve.

Claims 16, 19, 23-25, 30, 32, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US Patent 6,665,342) in view of Goldberg et al. (US Patent 5,963,203).

Brown et al. teaches the limitations of the independent claims 15 and 18, but fails to teach the limitations of the dependent claims 16, 19, 23-25, 30, 32, 37 and 39.

Goldberg et al. describes the limitations of claims 16 and 19 in column 11 lines 53-62 where data to be read out from at least one of a plurality of frames is determined for each in-picture position in accordance with a coordinate value. It would have been obvious to one of

Art Unit: 2671

ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide data that corresponds to the image region of interest that would be used to display the contents of the in-picture position of the image frames at their respective coordinates in respect to a time axis.

Goldberg et al. also describes the limitation of claim 23 in column 17 lines 38-49 where for each in-picture position, or an extractable object of the image, the special effects creation unit, which performs the functionality of the image conversion unit disclosed in claim 23, is described to apply a directing effect according to an attribute value of the position, where the attribute value is the positional coordinate that designates the pixels that define the region of the image that contains the particular extractable object(column 11 lines 58-62). It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide an attribute value that would be used to accurately identify the particular image region that would then contain the directing effect.

Goldberg et al. teaches what is disclosed in claim 24 in column 4 lines 51-57 where it is described that a time value, or z value, is used to designate time separation between the image frames. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide time intervals for each in-picture position, which enables the separation of particular image frames along a time axis.

Goldberg et al. teaches what is disclosed in claim 25 in column 10 lines 4-20 where the target frame, or at least one of the frames, is a previous frame or another frame in time with respect to a reference frame which should have been naturally outputted by image data output

Art Unit: 2671

unit from the image memory(column 9 lines 51-56), and is also described in column 10 lines 35-41 where Goldberg et al. states that the frames may be selected at certain time intervals and are spaced at positions relative to another as illustrated in Figure 5A. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide the referencing of frames at particular time intervals that would enable the natural display of image frames in succession, as well as allow previous frames along the time axis to be accessed as the target frame of interest.

Goldberg et al. describes what is disclosed in claim 30 in column 16 lines 33-41 where an attribute value, which is a value that designates the pixel position of the region of interest and is inherently utilized to select the region of interest, is described as a value that indicates the order of approximation, or an estimation that determines whether the object of interest is present, relative to a desired image pattern, which is determined by using known pattern matching techniques. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide a desired image pattern to be acquired within a certain margin of error, thereby improving the chances of locating the object of interest within an image region.

Goldberg et al. also describes the limitation of claim 37 in column 10 lines 21-34 where a setting input unit(column 9 lines 44-45) is described to set a value that is used to select a particular frame. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide the selection of one of the image frames at the request of user input.

Goldberg et al. describes what is disclosed in claim 39 in column 11 lines 53-55 where a setting input unit(column 9 lines 44-45) acquires, as a setting value, coordinates of characteristic points in the two-dimensional images. Goldberg et al. also describes that the image conversion unit(column 9 lines 58-64), which is understood to perform all processing, determines the at least one of the frames according to the coordinates of the characteristic points in column 11 lines 58-67 and column 12 lines 1-3. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Goldberg et al. because this combination would provide data that corresponds to an in-picture position that enables selection of a region of interest of one or a plurality of frames at the coordinate values input by the user.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US Patent 6,665,342) in view of Goldberg et al. (US Patent 5,963,203) in further view of Foley et al.

Brown et al. and Goldberg et al. teach what is disclosed in claim 20 except for a coordinate orthogonal to a scanning line. Brown et al. teaches the limitations of the independent claim 18, and Goldberg et al. teaches what is disclosed in the dependent claim 19 in column 11 lines 53-62 where it is described that a coordinate that corresponds to an in-picture position, but fails to teach that coordinate as orthogonal to a scanning line. Again, Brown et al. and Goldberg et al. fail to teach a coordinate orthogonal to a scanning line. Foley et al. teaches a scanning line that is orthogonal to a coordinate designating a position within an image, as illustrated in Figure 15.34. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. and Goldberg et al. with Foley et al. because this combination would produce a scan

Art Unit: 2671

line technique that renders every pixel in the image frame line by line each pixel containing an orthogonal relationship to the scanning line, and is one of the most effective and commonly used techniques known in the art.

Claims 26, 28 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US Patent 6,665,342) in view of Itoh et al. (US Patent 5,926,186).

Brown et al. teaches what is disclosed in claim 26 except for the each in-picture position of the images contained in the target frame, a predetermined pixel value is provided. Regarding claim 26, Itoh et al. teaches the image conversion unit add, or provide, a predetermined pixel value in accordance with an attribute value for each in-picture position of the images contained in the target image in column 14 lines 34-40, where the pixel value is a position of a point(element 40 of Figure 5A) or picture element that comprises the image, or pixel, that is found at the in-picture position, which is also illustrated as graphic 26 of Figure 5A.

Brown et al. teaches what is disclosed in claim 28 except that an attribute value is a depth value. Itoh et al. teaches the limitation of claim 28 in column 20 lines 35-40 where it is described that the attribute value is a value designating time, which is equivalent to a value designating depth or a value along a z axis. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Itoh et al. because this combination would provide a predetermined pixel value that is used to designate in-picture positions, or image regions of interest, from which to display certain features of movement and change generated images at certain time intervals.

Brown et al. teaches what is disclosed in claim 32 except that an attribute value is a value that indicates a degree of change of an image area in time. Itoh et al. teaches the limitation of claim 31 in column 20 lines 35-40 where it is described that an attribute value represents the passage of time. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. with Itoh et al. because this combination would provide a value that represents the degree of change in time for each image frame surface which would enable the distinction of movement of pixel within an image region from frame to frame in respect to time.

Claims 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US Patent 5,963,203) in view of Itoh et al. (US Patent 5,926,186).

Goldberg et al. teaches what is disclosed in claim 27 except that an attribute value is a depth value. Itoh et al. teaches the limitation of claim 27 in column 20 lines 35-40 where it is described that the attribute value is a value designating time, which is equivalent to a value designating depth or a value along a z axis. The motivation for combining the teachings of Goldberg et al. with Itoh et al. is the same as the motivation stated above for claim 28.

Goldberg et al. teaches what is disclosed in claim 31 except that an attribute value is a value that indicates a degree of change of an image area in time. Itoh et al. teaches the limitation of claim 31 in column 20 lines 35-40 where it is described that an attribute value represents the passage of time. It would have been obvious to one of ordinary skill in the art to combine the teachings of Goldberg et al. with Itoh et al. because this combination would provide a value that

Art Unit: 2671

the degree of change in time for each image frame surface which would enable the distinction of movement of pixel within an image region from frame to frame in respect to time.

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (US Patent 6,665,342) in view of Itoh et al. in further view of Kaneko et al. (US Patent 6,940, 997).

Brown et al. and Itoh et al. teach what is disclosed in claim 38 except a curve that indicates the relationship between coordinates of points contained in the two-dimensional images and time values. Kaneko teaches a relationship between the coordinates of points contained in the two-dimensional images and time values in column 12 lines 20-28, and is also illustrated on a graph represented by a curve in Figure 2C. It would have been obvious to one of ordinary skill in the art to combine the teachings of Brown et al. and Itoth et al. with Kaneko et al. because this combinations would provide a visual relationship between the two-dimensional coordinate points and time values that would be modified by a user to enable the ability to adjust the generated curve.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The other references listed on the attached PTO-892 form are made of record because they pertain to the division of video or moving image data into image frames that are separated over a time axis.




Art Unit: 2671

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Said Broome whose telephone number is (571)272-2931. The examiner can normally be reached on 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.Broome SB  
9/28/2005

  
RICHARD HJERPE 9/29/05  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600